

## CLAIMS

1. A method of detecting or differentiating rheumatoid arthritis, wherein the levels of human L-PGDS in a sample collected from a subject is measured.
2. The method of detecting or differentiating rheumatoid arthritis according to claim 1, wherein the levels of human L-PGDS in a sample collected from a subject is measured, and the measurement value is compared with a cut-off value that has been predetermined based on measurement values of human L-PGDS in samples collected from healthy volunteers and/or patients with joint diseases other than rheumatoid arthritis.
3. A method of determining the stage of disease with regard to rheumatoid arthritis, wherein the levels of human L-PGDS in a sample collected from a subject is measured and the stage of disease with regard to rheumatoid arthritis is estimated based on the measurement value.
4. The method of determining the stage of disease with regard to rheumatoid arthritis according to claim 3, wherein the levels of human L-PGDS in a sample collected from a subject is measured and the measurement value is compared with a cut-off value that has been predetermined based on classification of measurement values of human L-PGDS in samples collected from rheumatoid arthritis patients in accordance with the stage of disease.
5. A method of determining the degree of dysfunction with regard to rheumatoid arthritis, wherein the levels of human L-PGDS in a sample is measured and the degree of dysfunction (severity) with regard to rheumatoid arthritis is estimated based on the measurement value.
6. The method of determining the degree of dysfunction with regard to rheumatoid arthritis according to claim 5, wherein the levels of human L-PGDS in a sample is measured and the measurement value is compared with the cut-off value that has been predetermined based on classification of measurement values of human L-PGDS in samples collected from rheumatoid arthritis patients in accordance with the degree of dysfunction (severity).

7. The method according to any one of claims 1 to 6, wherein the levels of human L-PGDS in a sample is measured by immunoassay.
8. The method according to any one of claims 1 to 6, wherein the sample is a body fluid.
9. The method according to any one of claims 1 to 6, wherein the sample is a joint fluid.
10. The method according to any one of claims 1 to 6, wherein the sample is urine or blood.
11. An antibody specifically recognizing human L-PGDS for detection or differentiation of rheumatoid arthritis and for determination of the stage of disease or the degree of dysfunction with regard to rheumatoid arthritis.
12. An agent for detection or differentiation of rheumatoid arthritis and an agent for determination of the stage of disease or the degree of dysfunction with regard to rheumatoid arthritis, comprising an antibody specifically recognizing human L-PGDS as an active ingredient.
13. A kit for detection or differentiation of rheumatoid arthritis, comprising an antibody specifically recognizing human L-PGDS.
14. A human L-PGDS detection kit for detection or differentiation of rheumatoid arthritis, which is selected from a group consisting of (1) to (4) listed below:
  - (1) A reagent comprising an enzyme-labeled monoclonal antibody specifically recognizing human L-PGDS and a substrate solution;
  - (2) A reagent comprising a monoclonal antibody specifically recognizing human L-PGDS, an enzyme-labeled said monoclonal antibody or an enzyme-labeled polyclonal antibody specifically recognizing human L-PGDS, and a substrate solution;
  - (3) A reagent comprising a biotinylated monoclonal antibody specifically recognizing human L-PGDS, an enzyme-labeled avidin or streptavidin, a substrate solution, and a monoclonal antibody specifically recognizing human L-PGDS; and
  - (4) A reagent comprising a biotinylated monoclonal antibody specifically recognizing human L-PGDS or a biotinylated polyclonal antibody specifically recognizing human L-PGDS, an enzyme-labeled avidin or streptavidin, and a substrate solution.